United States Department of Agriculture

Water and Climate Update

February 2, 2017

The Natural Resources Conservation Service produces this weekly report using data and products from the National Water and Climate Center and other agencies. The report focuses on seasonal snowpack, precipitation, temperature, and drought conditions in the U.S.

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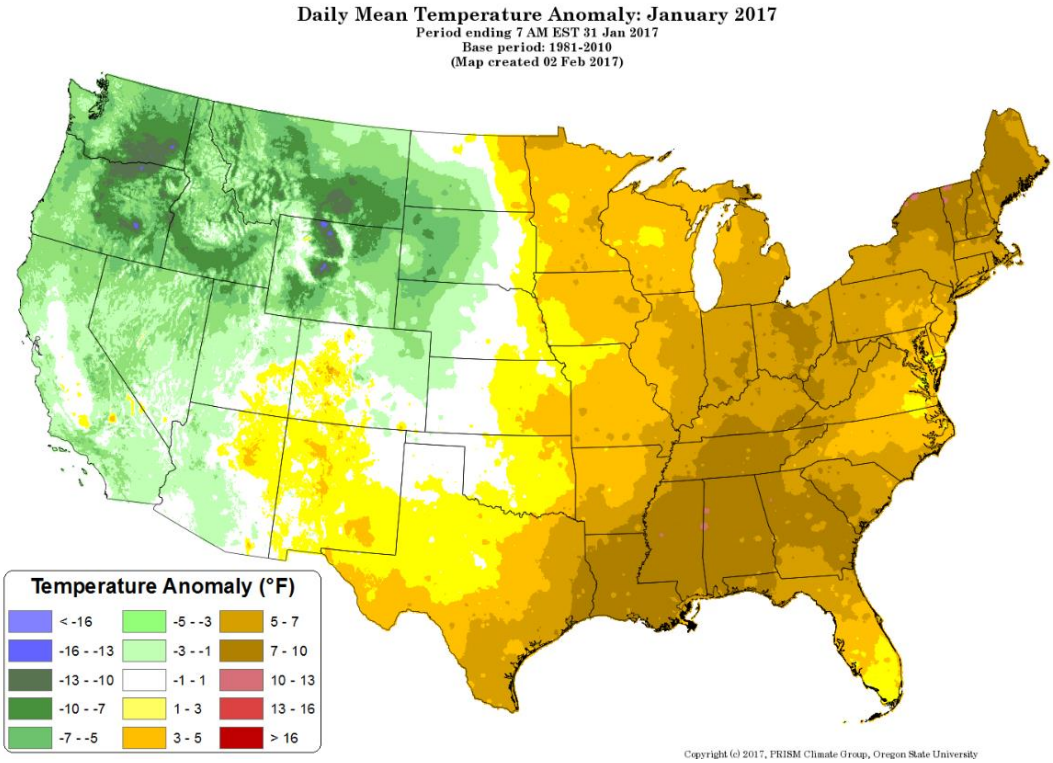
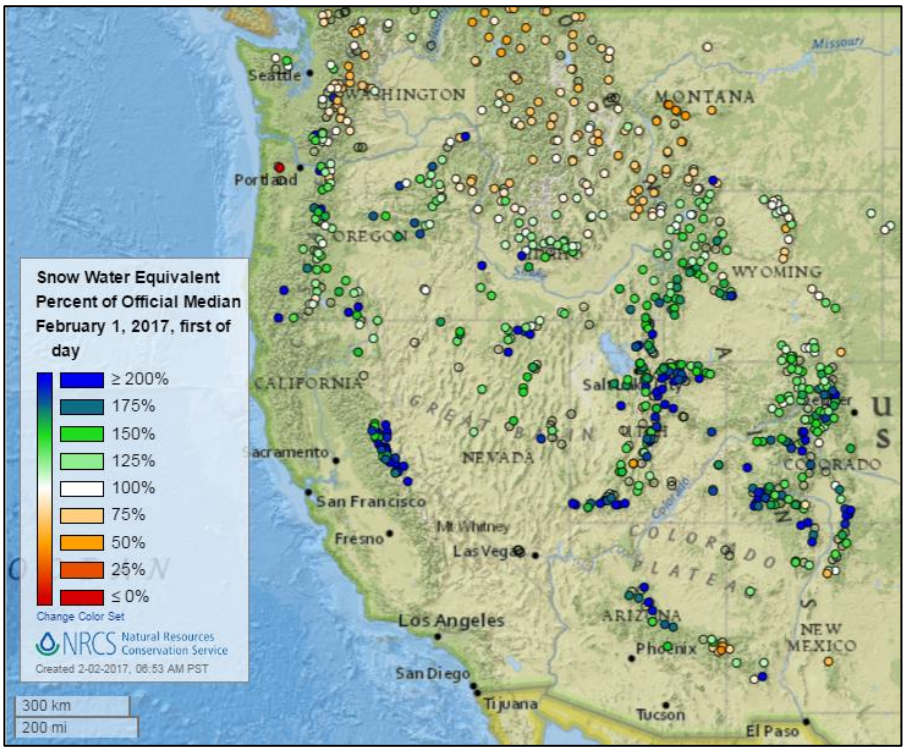
January temperatures cold in West, warm in East



January temperature anomalies as reported by the Oregon State University PRISM Climate Group were much above normal in the East. The highest 7- to 10-degree departures from normal were in several areas from northern New England through the Ohio Valley, and a large area of the South from Texas to South Carolina. Most of the West reported below normal temperatures, with the largest departures of 10 to 13 degrees reported in eastern Oregon and Washington, and Wyoming.

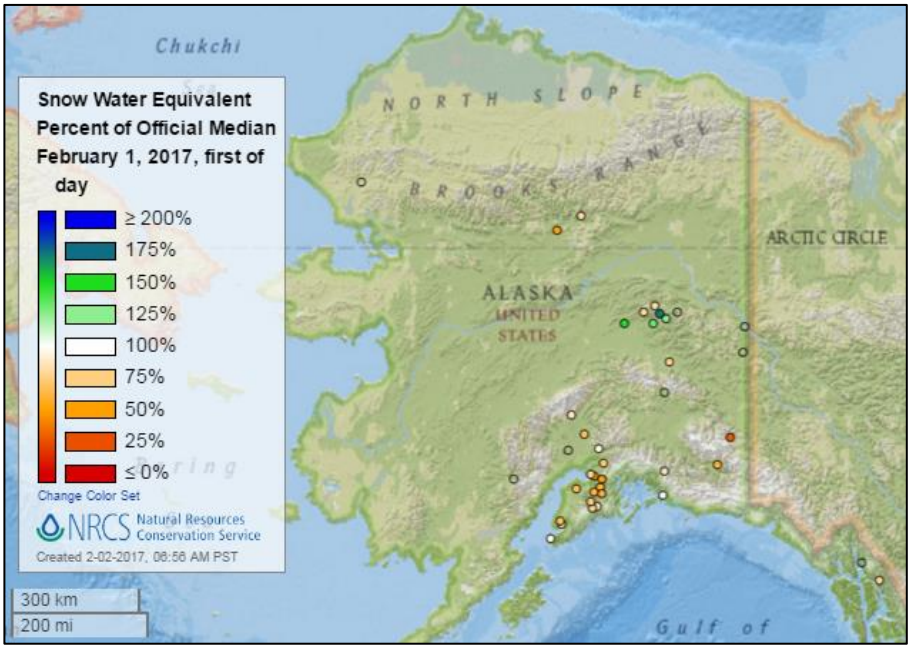
Snow

Current Snow Water Equivalent, NRCS SNOTEL Network



[Snow water equivalent percent of median map]

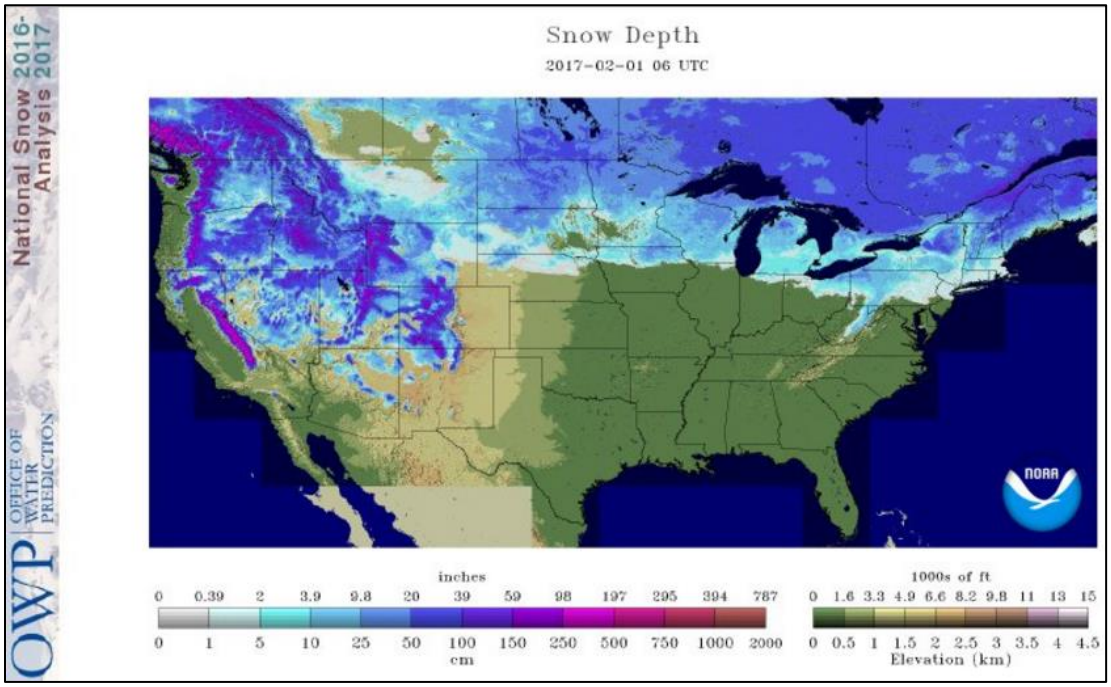
See also:
[Snow water equivalent values (inches) map]



[Alaska snow water equivalent percent of median map]

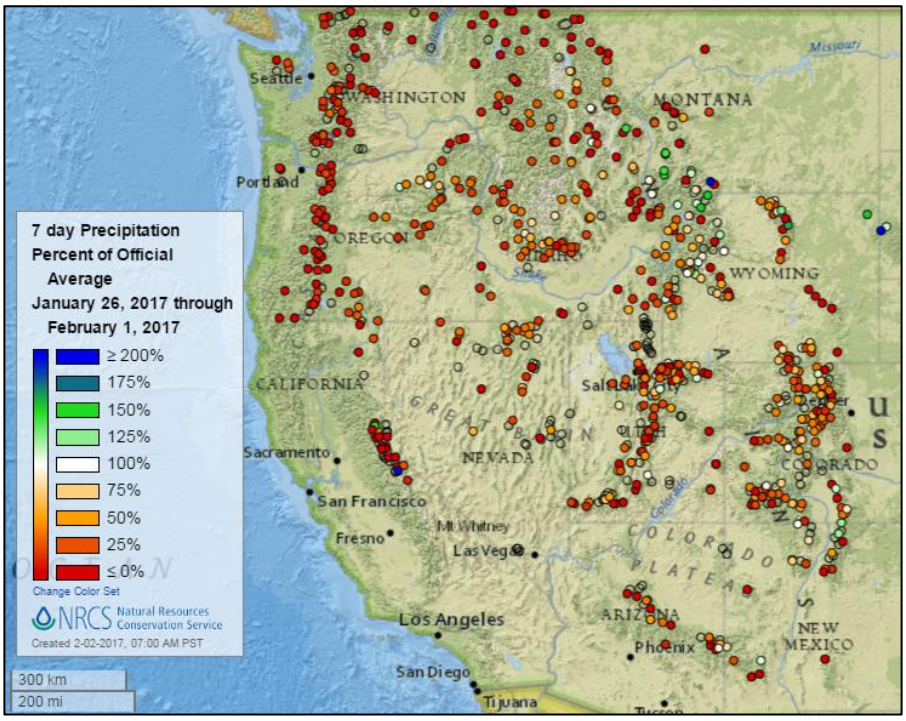
See also:
[Alaska snow water equivalent values (inches) map]

Current Snow Depth, National Weather Service (NWS) Networks



Precipitation

Last 7 Days, Western Mountain Sites (NRCS SNOTEL Network)

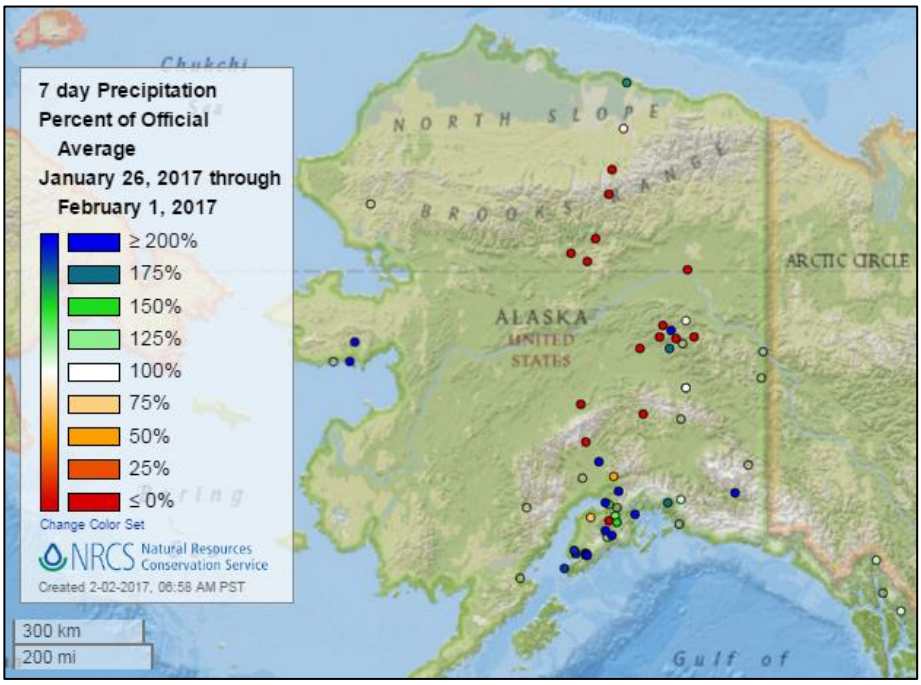


[7-day precipitation percent of average map]

See also:
[7-day total precipitation values (inches) map]

Alaska 7-day precipitation percent of average map

See also: Alaska 7-day total precipitation values (inches) map

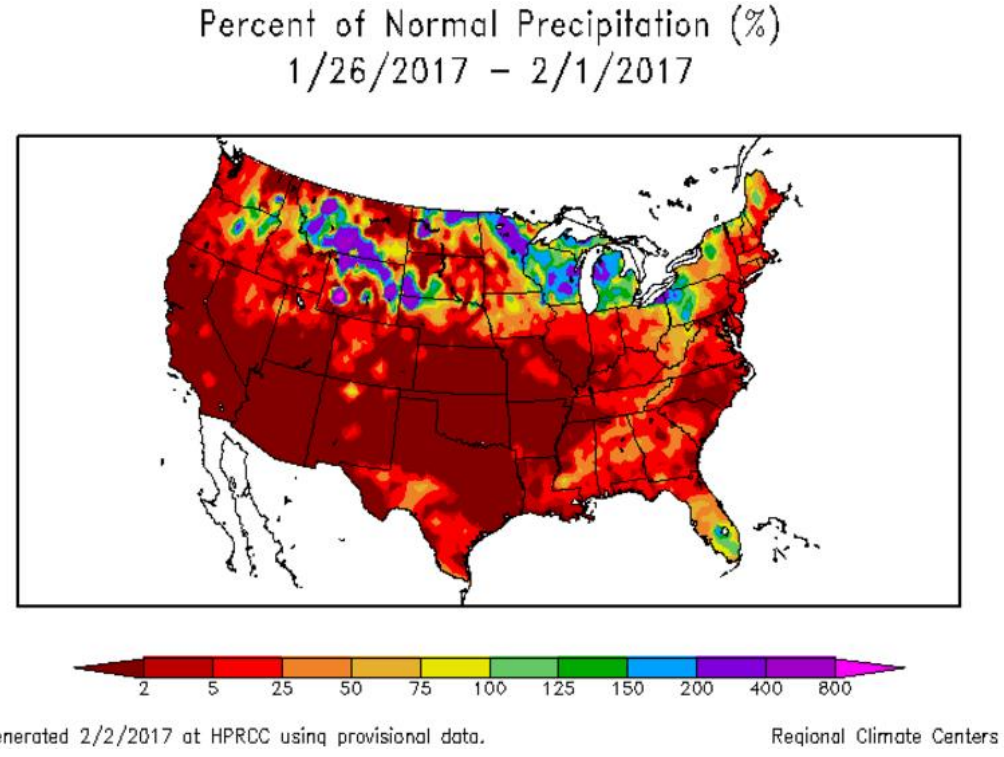


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

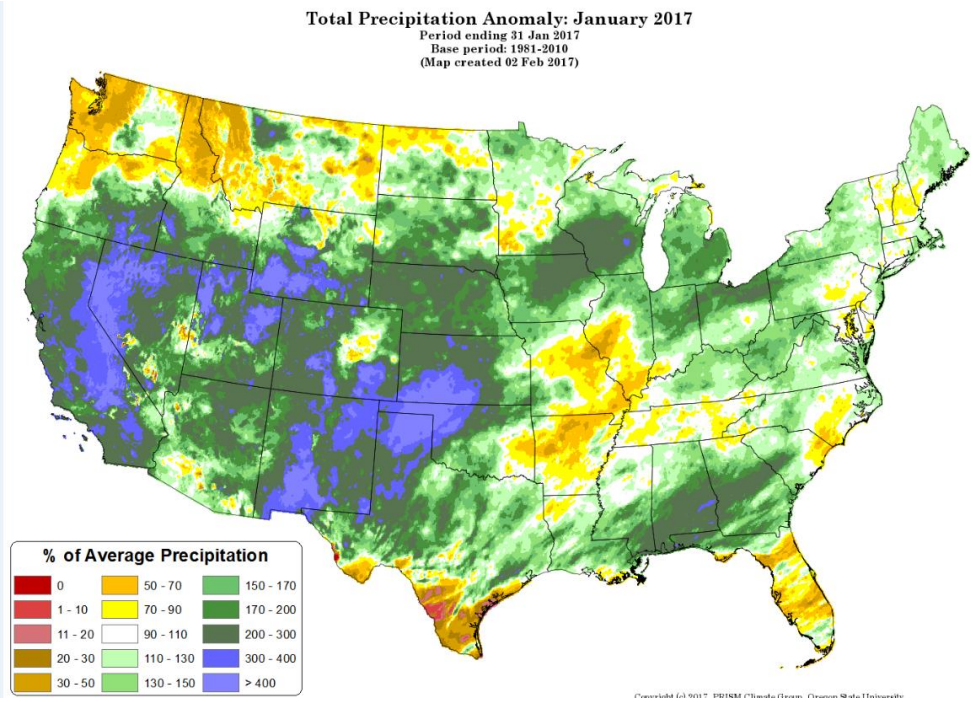
7-day precipitation percent of normal map for the continental U.S.

See also: 7-day total precipitation values (inches) map



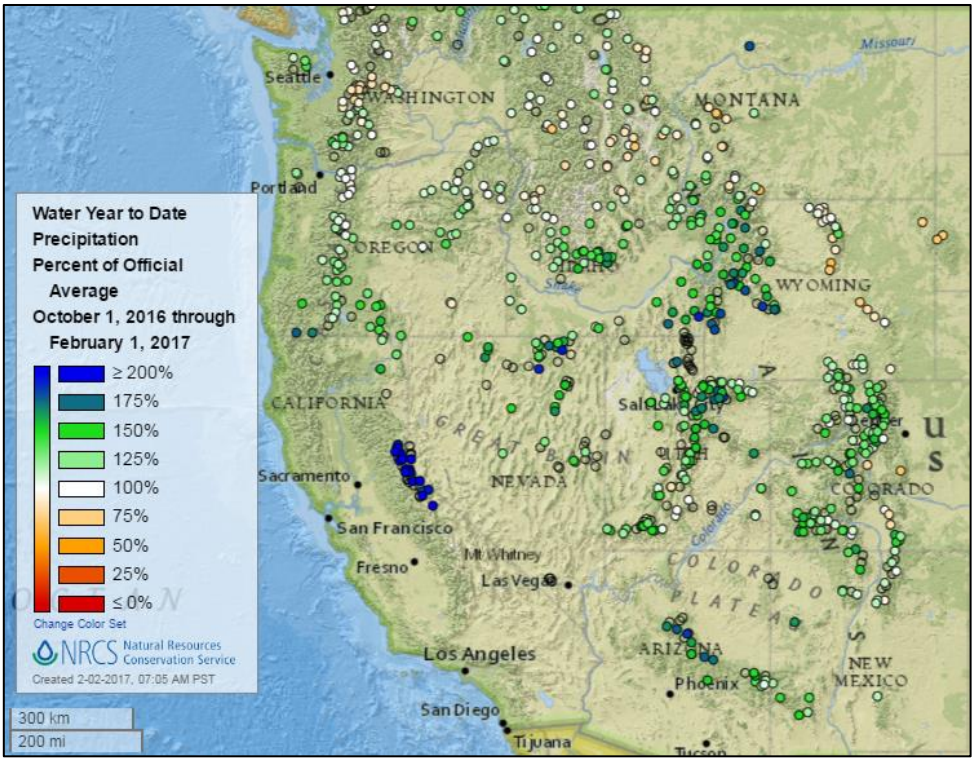
Previous Month, All Available Data Including SNOTEL and NWS Networks

Source: PRISM



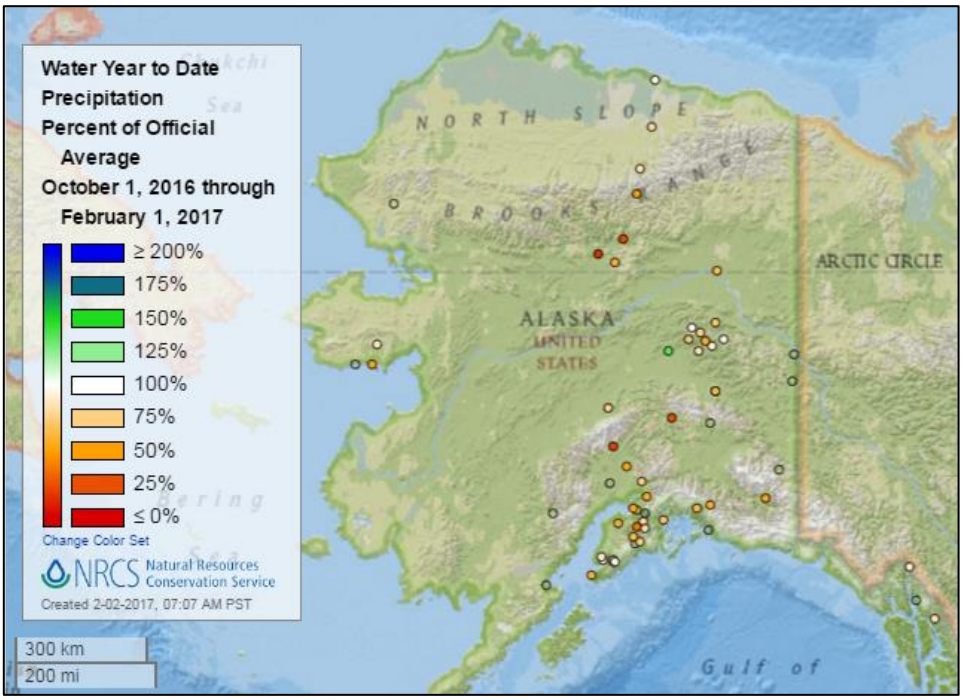
[Previous month national precipitation percent of average map]

Water Year-to-Date, Western Mountain Sites (NRCS SNOTEL Network)



[2017 water year-to-date precipitation percent of average map]

See also: [2017 water year-to-date precipitation values (inches)]



Alaska 2017 water year-to-date precipitation percent of average map

See also: Alaska 2017 water year-to-date precipitation values (inches) map

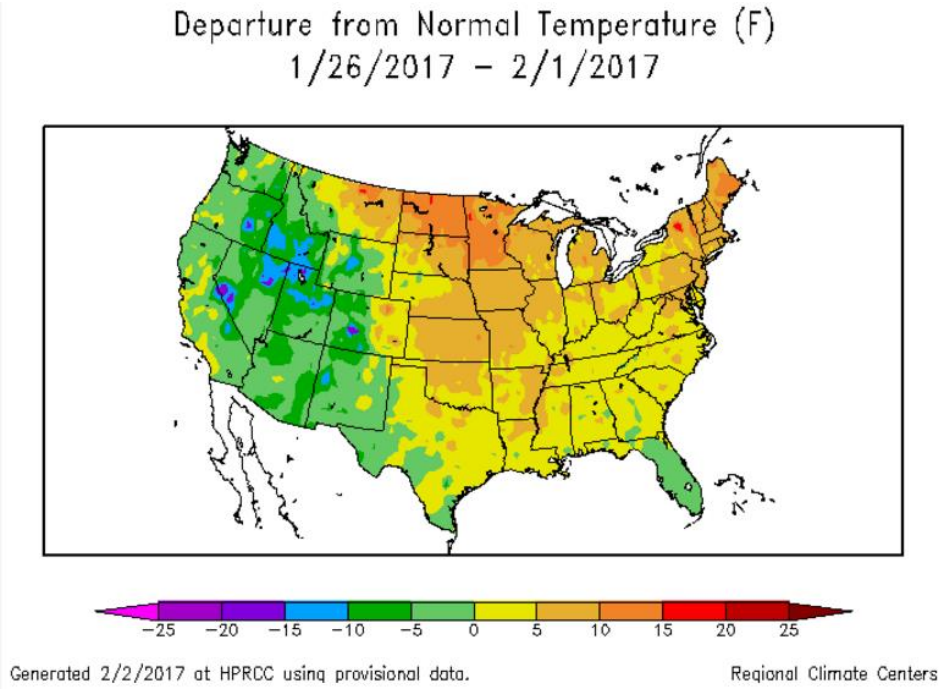
Temperature

Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

7-day temperature anomaly map for the continental U.S.

See also: 7-day temperature (° F) map

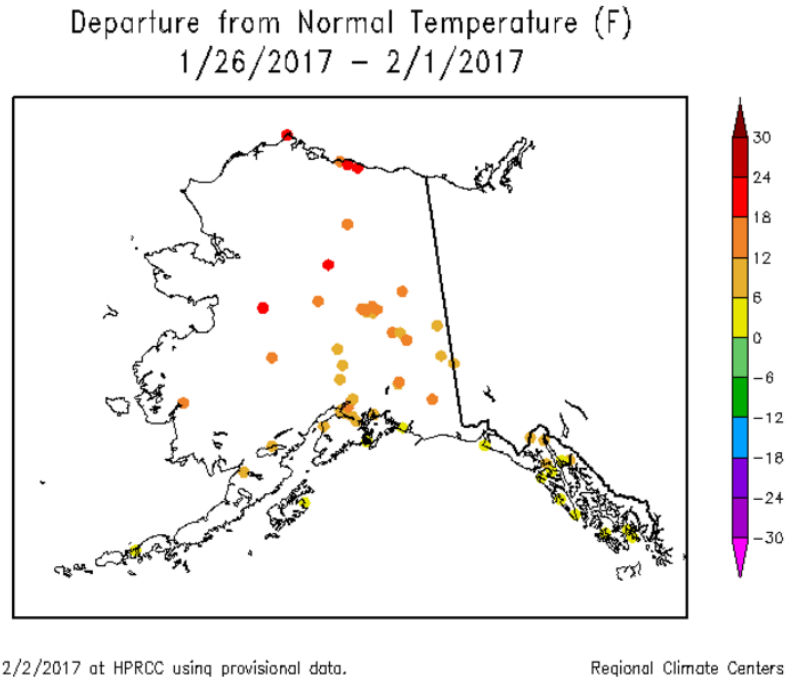


Last 7 Days, National Weather Service (NWS) Networks

Source: Regional Climate Centers

[7-day temperature anomaly map](#) for Alaska.

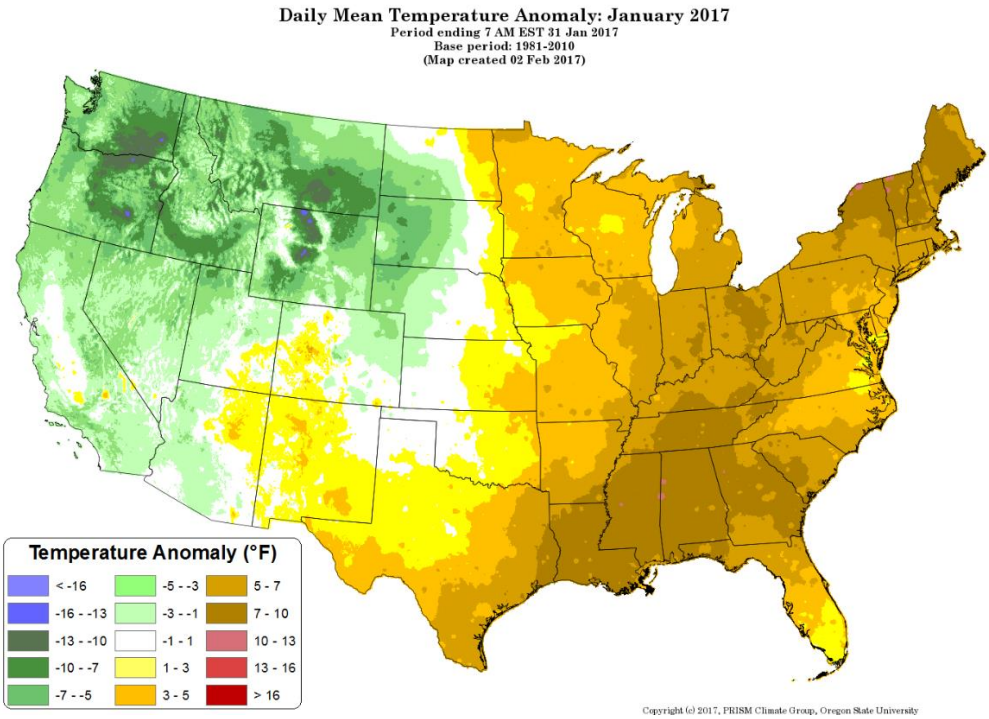
See also: [7-day temperature (° F) map](#)



Previous Month, All Available Data Including SNOTEL and NWS Networks

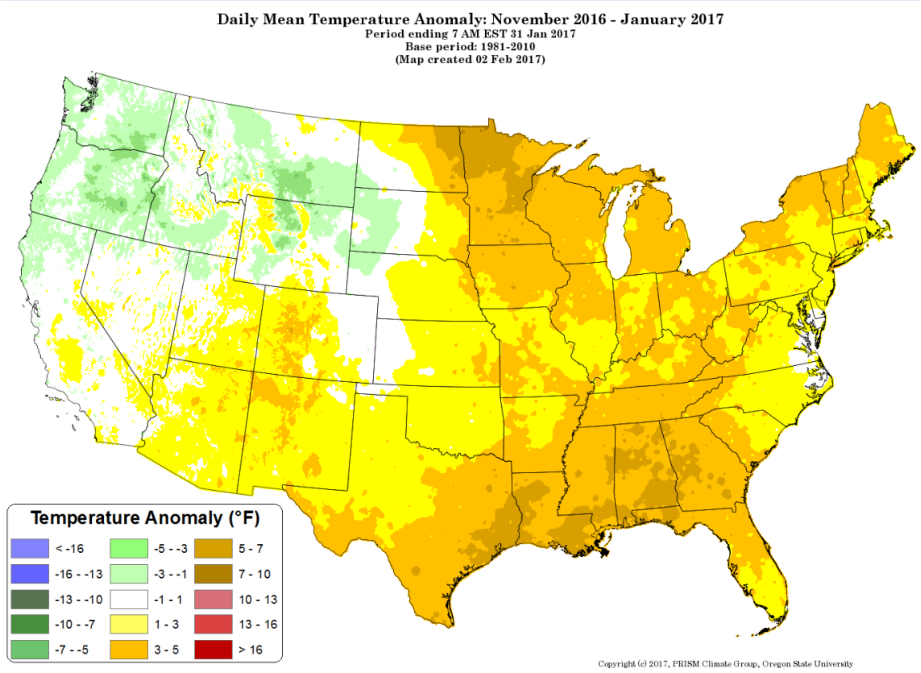
Source: PRISM

[Previous month national daily mean temperature anomaly map](#)



Last 3 Months, All Available Data Including SNOTEL and NWS Networks

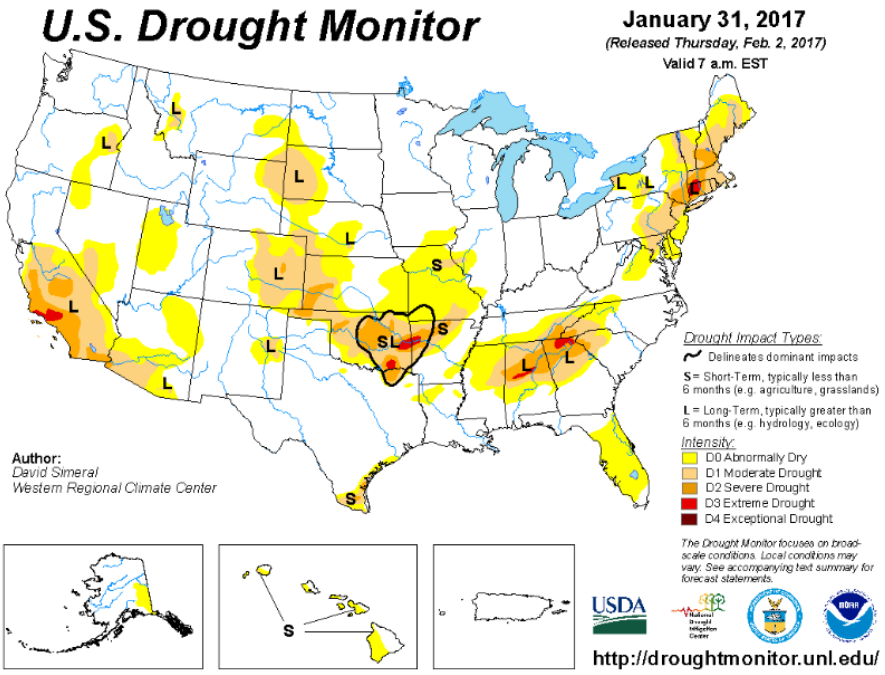
Source: PRISM



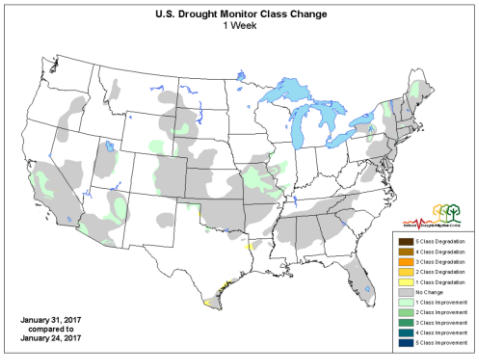
November 2016 through January 2017 daily mean temperature anomaly map

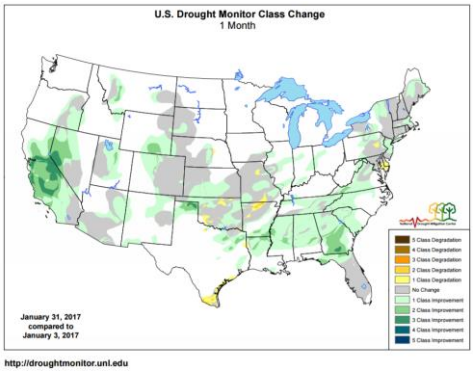
Drought

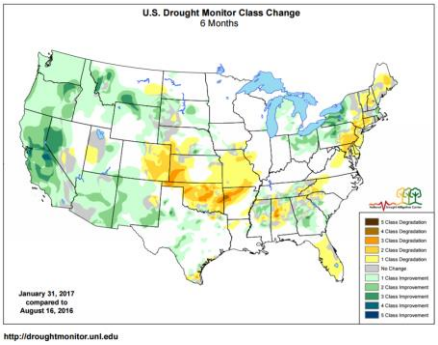
U.S. Drought Monitor See map below. U.S. Drought Portal Comprehensive drought resource.

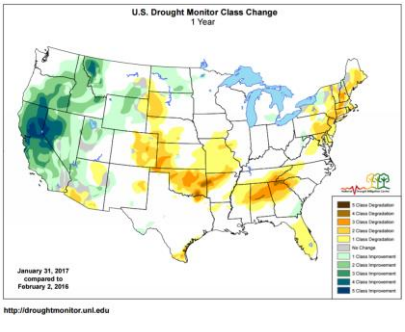


Changes in Drought Monitor Categories over Time









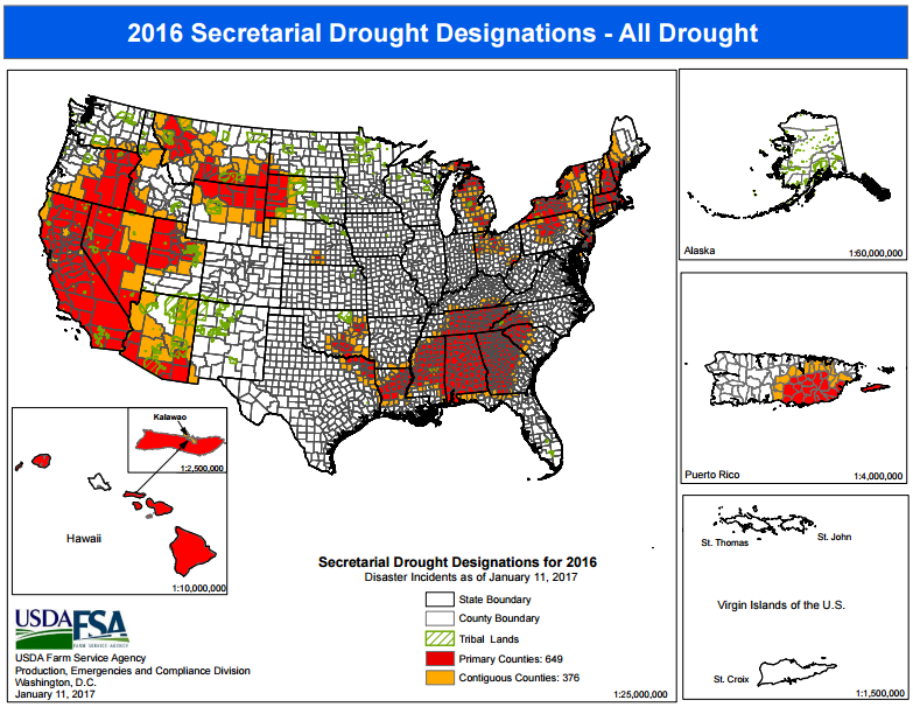
Changes in drought conditions over the last 12 months

Current National Drought Summary, January 31, 2017

Authors: David Simeral, Western Regional Climate Center

"This U.S. Drought Monitor week saw generally dry conditions across most of the conterminous U.S. during the past week. Snow showers fell across parts of the upper Midwest as well as downwind locations of the Great Lakes where moderate-to-heavy snowfall accumulations were observed. Out West, an overall dry pattern prevailed, and temperatures were well below normal with the greatest departures observed across the Great Basin and Intermountain West. Conversely, temperatures were well above normal across the Northern Plains, Upper Midwest, and New England. Overall, minor improvements were made on the map in parts of the Northeast, Midwest, Desert Southwest, and portions of California."

USDA 2016 Secretarial Drought Designations

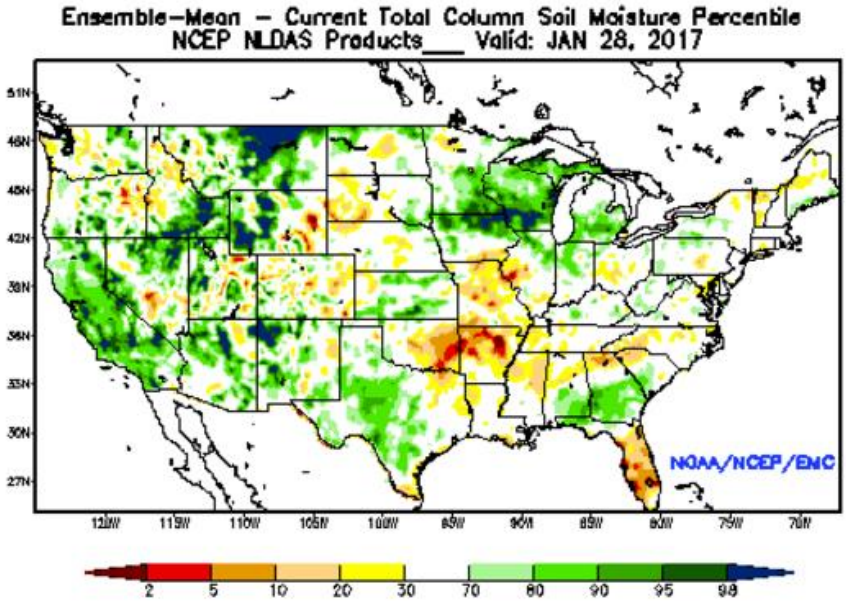


Highlighted Drought Resources

- Drought Impact Reporter
- Quarterly Regional Climate Impacts and Outlook
- U.S. Drought Portal Indicators and Monitoring
- U.S. Population in Drought, Weekly Comparison
- USDA Disaster and Drought Information

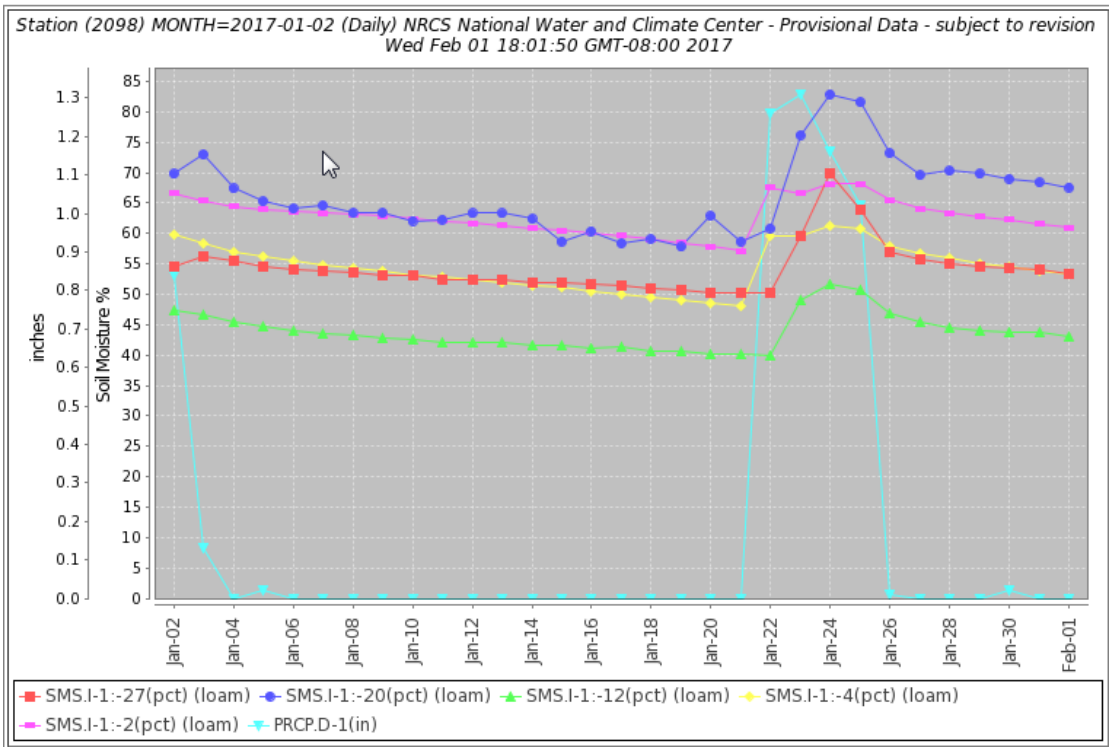
Other Climatic and Water Supply Indicators

Soil Moisture



Modeled soil moisture percentiles as of January 28, 2017.

Soil Moisture Data: NRCS Soil Climate Analysis Network (SCAN)



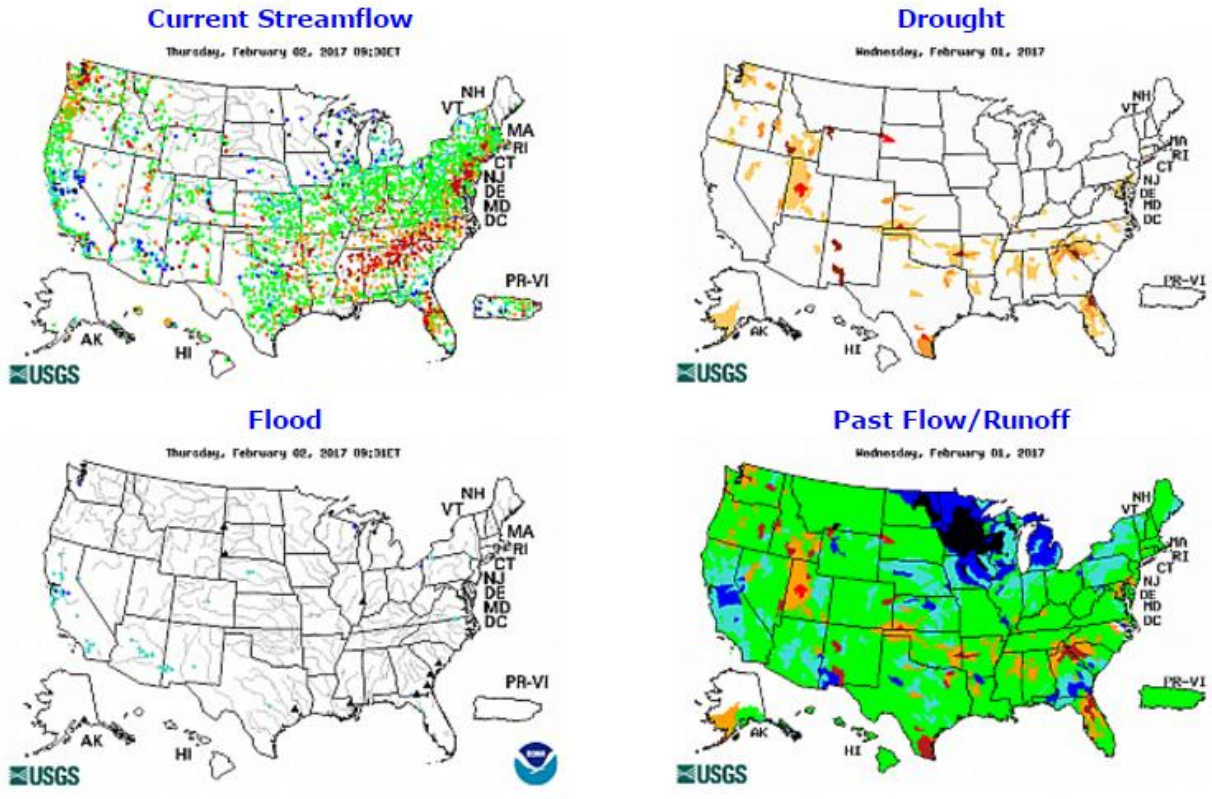
Soil moisture (at 2-, 4-, 8-, 20-, and 40-inch depths) and precipitation for the last 30 days at the Pua Akala SCAN station 2098 in Hawaii. Precipitation events on January 22 – 25 of over 4.5 inches resulted in an increase in soil moisture at all depth sensors.

Soil Moisture Data Portals

CRN Soil Moisture
Texas A&M University North American Soil Moisture Database
University of Washington Experimental Modeled Soil Moisture

Streamflow

Source: USGS



Click to enlarge and display legends

Current streamflow maps

Current Reservoir Storage

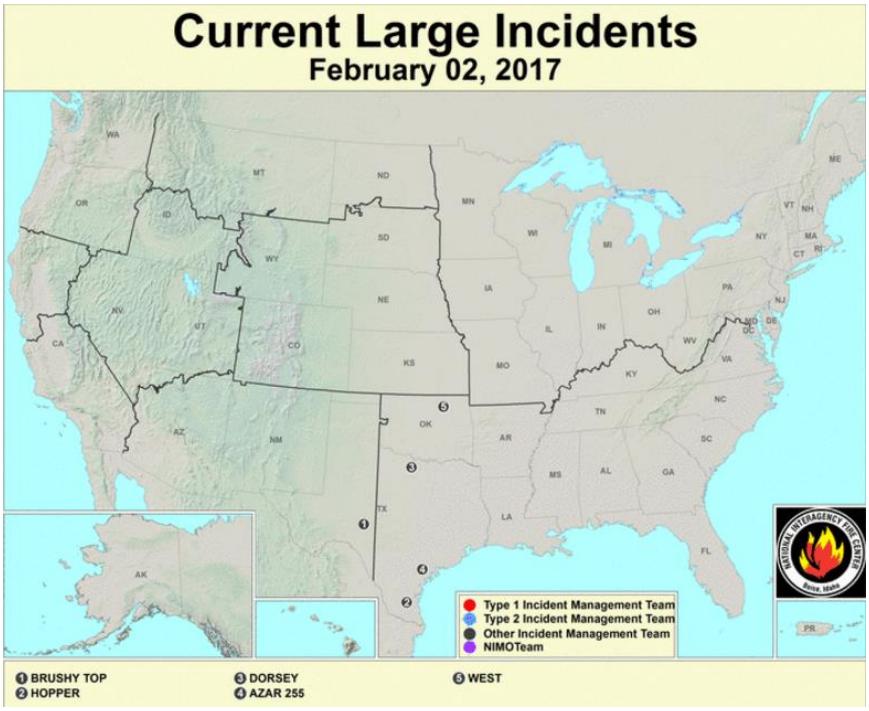
National Water and Climate Center Reservoir Data

U.S. Bureau of Reclamation Hydromet Tea Cup Reservoir Depictions:

Upper Colorado
Pacific Northwest/Snake/Columbia
Sevier River Water, Utah
Upper Missouri, Kansas, Oklahoma, Texas

California Reservoir Conditions

Wildfires: [USDA Forest Service Active Fire Mapping]



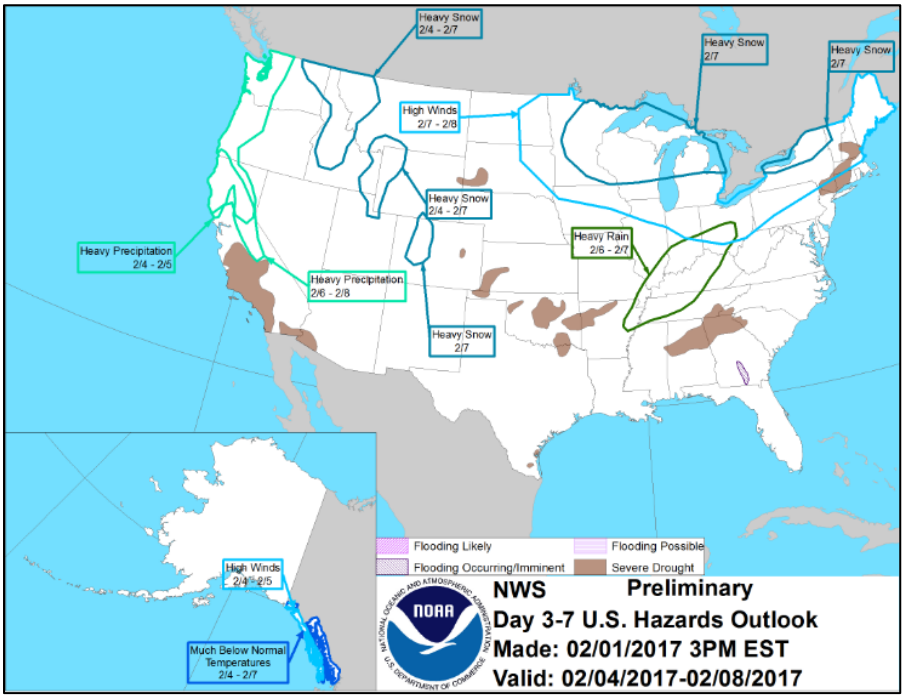
Short- and Long-Range Outlooks

Agricultural Weather Highlights

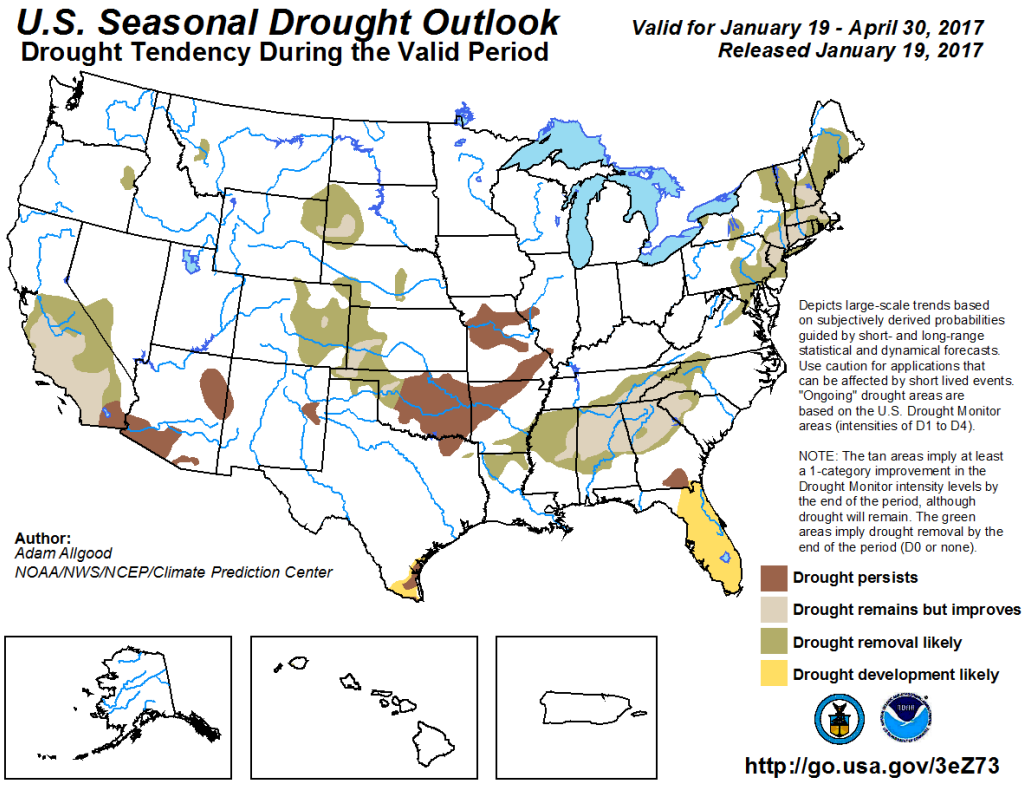
Author: Eric Luebehusen, Agricultural Meteorologist, USDA/OCE/WAOB

National Outlook, February 2, 2017**:** "Northern and central California and the Northwest will be the focus for heavy precipitation, including substantial snow in areas already hit hard by a cold, stormy winter. Five-day totals could reach 2 to 10 inches in northern and central California and 1 to 5 inches in the Northwest. The Sierra Nevada, which received more than a year's worth of snow during the first 4 months (October 2016 – January 2017) of the Western water year, will experience another set of significant storms. In contrast, dry weather will prevail through the weekend in the Southwest and large sections of the Plains. Periods of light precipitation will occur across the eastern half of the U.S., but 5-day totals will be largely an inch or less. Meanwhile, a short-lived surge of colder air will cover the U.S., except the Deep South. Late in the weekend, however, temperatures will rebound to above-normal levels nearly nationwide. The NWS 6- to 10-day outlook for February 7 – 11 calls for the likelihood of above-normal temperatures and precipitation across the majority of the country. Colder-than-normal conditions will be confined to the nation's northern tier from the Great Lakes region to New England, while drier-than-normal weather should be limited to areas from southern California to the southern half of the Plains."

NWS Climate Prediction Center Weather Hazard Outlook: February 4 – 8, 2017

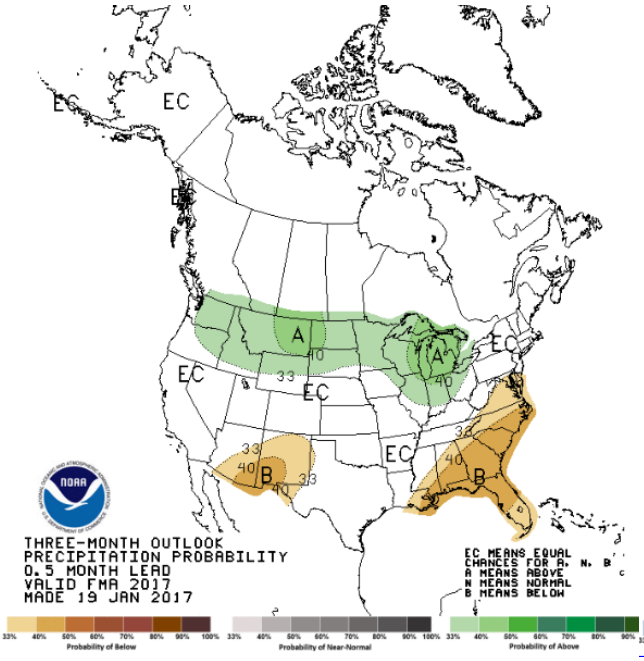


NWS Seasonal Drought Outlook: January 19, 2017 – April 30, 2017



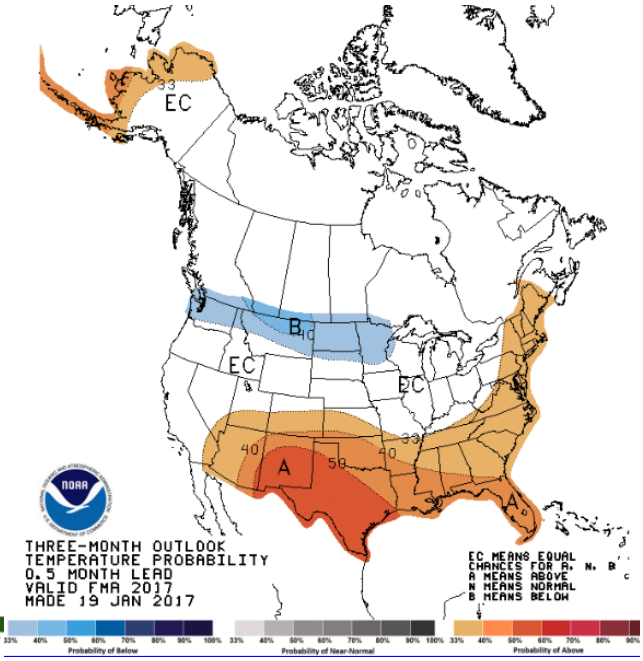
NWS Climate Prediction Center 3-Month Outlook

Precipitation



[February-March-April (FMS) 2017 precipitation outlook summary]

Temperature



[February-March-April (FMA) 2017 temperature outlook summary]

More Information

The NRCS [National Water and Climate Center] publishes this weekly report. We welcome your feedback. If you have questions or comments, please [contact us].